

## ABSTRACT

There is provided a ultrasonic motion detecting device that detects a three-dimensional motion of an object. The ultrasonic motion detecting device, comprises first and second  
5 ultrasonic transducers 13 having piezoelectric elements arranged in an array, which transmit ultrasonic waves to an object and acquire reflection signals from the object, a motion detection unit 20 that extracts an estimation region which is used for estimating a motion of the object from the reflection  
10 signals that are acquired by the first and second ultrasonic transducers, and detects a three-dimensional motion within the estimation region, and an image display unit 19 that displays the three-dimensional motion within the estimation region, wherein ultrasonic wave scanning surfaces due to the first and  
15 second ultrasonic transducers cross over each other.